SEQUENCE LISTING

SEQ ID NO:1

Nucleic acid encoding CS37 VH (31G9)

```
        10         20         30         40         50
CAGGTGCAGCTGGTGCAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTC

        60         70         80         90        100
CCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCTATGGCA

       110        120        130        140        150
TGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTT

       160        170        180        190        200
ATATCATATGATGGAAGTATTAAATACTATGCAGACTCCGTGAAGGGCCG

       210        220        230        240        250
ATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGA

       260        270        280        290        300
ACAGCCTGAGAGCTGAGGACACGGCTGTGTATTACTGTGCGCGAACTGGT

       310        320        330        340        350
GAATATAGTGGCTACGATACGAGTGGTGTGGAGCTCTGGGGGCAAGGGAC

       360
CACGGTCACCGTCTCCTCA
```

SEQ ID NO:2

Amino acid sequence of CS37 VH (31G9)

Q V Q L V Q S G G G V V Q P G R S L R L S C
A A S G F T F S S Y G M H W V R Q A P G K G
L E W V A V I S Y D G S I K Y Y A D S V K G
R F T I S R D N S K N T L Y L Q M N S L R A
E D T A V Y Y C A R T G E Y S G Y D T S G V
E L W G Q G T T V T V S S

SEQ ID NO:3

Nucleic acid encoding SL15 VH

```
        10         20         30         40         50
GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTC

        60         70         80         90        100
CCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCTATGGCA

       110        120        130        140        150
TGCACTGGGTCCGCCAGGCTCCAGGCAAGGAGCTGGAGTGGGTGGCAGTT

       160        170        180        190        200
ATATCATATGATGGAAGTATTAAATACTATGCAGACTCCGTGAAGGGCCG

       210        220        230        240        250
ATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGA

       260        270        280        290        300
ACAGCCTGAGAGCTGAGGACACGGCTGTGTATTACTGTGCGCGAACTGGT

       310        320        330        340        350
```

GAATATAGTGGCTACGATACGGACCCCCAGTACTCCTGGGGGCAAGGGAC

360

CACGGTCACCGTCTCCTCA

SEQ ID NO:4

Amino acid sequence of SL15 VH

E V Q L V E S G G G V V Q P G R S L R L S C
A A S G F T F S S Y G M H W V R Q A P G K E
L E W V A V I S Y D G S I K Y Y A D S V K G
R F T I S R D N S K N T L Y L Q M N S L R A
E D T A V Y Y C A R T G E Y S G Y D T D P Q
Y S W G Q G T T V T V S S

SEQ ID NO:5

Nucleic acid encoding SL15A VL (CS37)

10 20 30 40 50
GAAATTGTGCTGACTCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGA

60 70 80 90 100
CAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTGGAGATGATTTGG

110 120 130 140 150
GCTGGTATCAGCAGAAGCCAGGGAAAGCCCCTATCCTCCTGATCTATGGT

160 170 180 190 200
ACATCCACTTTACAAAGTGGGGTCCCGTCAAGGTTCAGCGGCAGTGGATC

```
      210        220        230        240        250
TGGCACAGATTTCACTCTCACCATCAACAGCCTGCAGCCTGAAGATTTTG

      260        270        280        290        300
CAACTTATTACTGTCTACAAGATTCCAATTACCCGCTCACTTTCGGCGGA

      310        320
GGGACACGACTGGAGATTAAA
```

SEQ ID NO:6

Amino acid sequence of SL15A VL (CS37)

```
E I V L T Q S P S S L S A S V G D R V T I T
C R A S Q G I G D D L G W Y Q Q K P G K A P
I L L I Y G T S T L Q S G V P S R F S G S G
S G T D F T L T I N S L Q P E D F A T Y Y C
L Q D S N Y P L T F G G G T R L E I K
```

SEQ ID NO:7

Nucleic acid encoding SL15S VL

```
       10         20         30         40         50
GAAATTGTGCTGACTCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGA

       60         70         80         90        100
CAGAGTCACCATCACTTGCCGGTCAAGTCAGGGCATTGGAGATGATTTGG

      110        120        130        140        150
GCTGGTATCAGCAGAAGCCAGGGAAAGCCCCTATCCTCCTGATCTATGGT
```

```
      160        170        180        190        200
ACATCCACTTTACAAAGTGGGGTCCCGTCAAGGTTCAGCGGCAGTGGATC

      210        220        230        240        250
TGGCACAGATTTCACTCTCACCATCAACAGCCTGCAGCCTGAAGATTTTG

      260        270        280        290        300
CAACTTATTACTGTCTACAAGATTCCAATTACCCGCTCACTTTCGGCGGA

      310        320
GGGACACGACTGGAGATTAAA
```

SEQ ID NO:8

Amino acid sequence of SL15S VL

```
E I V L T Q S P S S L S A S V G D R V T I T
C R S S Q G I G D D L G W Y Q Q K P G K A P
I L L I Y G T S T L Q S G V P S R F S G S G
S G T D F T L T I N S L Q P E D F A T Y Y C
L Q D S N Y P L T F G G G T R L E I K
```

SEQ ID NO:9

Nucleic acid sequence encoding JT182 VH

```
       10         20         30         40         50
CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTC

       60         70         80         90        100
CCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCTATGGCA
```

```
      110        120        130        140        150
TGCACTGGGTCCGCCAGGCTCCAGGCAAGGAGCTGGAGTGGGTGGCAGTT

      160        170        180        190        200
ATATCATATGATGGAAGTATTAAATACTATGCAGACTCCGTGAAGGGCCG

      210        220        230        240        250
ATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGA

      260        270        280        290        300
ACAGCCTGAGAGCTGAGGACACGGCTGTGTATTACTGTGCGCGAACTGGT

      310        320        330        340        350
GAATATAGTGGCTACGATACGCCCGCCTCGCCGGACTGGGGGCAAGGGAC

      360
CACGGTCACCGTCTCCTCA
```

SEQ ID NO:10

Amino acid sequence of JT182 VH

```
Q  V  Q  L  V  E  S  G  G  G  V  V  Q  P  G  R  S  L  R  L  S  C
A  A  S  G  F  T  F  S  S  Y  G  M  H  W  V  R  Q  A  P  G  K  E
L  E  W  V  A  V  I  S  Y  D  G  S  I  K  Y  Y  A  D  S  V  K  G
R  F  T  I  S  R  D  N  S  K  N  T  L  Y  L  Q  M  N  S  L  R  A
E  D  T  A  V  Y  Y  C  A  R  T  G  E  Y  S  G  Y  D  T  P  A  S
P  D  W  G  Q  G  T  T  V  T  V  S  S
```

SEQ ID NO:11

SYGMH

SEQ ID NO:12
VISYDGSIKYYADSVKG

SEQ ID NO:13
TGEYSGYDTDPQYS

SEQ ID NO:14
TGEYSGYDTSGVEL

SEQ ID NO:15
TGEYSGYDTPASPD

SEQ ID NO:16
RASQGIGDDLG

SEQ ID NO:17
GTSTLQS

SEQ ID NO:18
LQDSNYPLT

SEQ ID NO:19
RSSQGIGDDLG

SEQ ID NO:21
CTAAGCTTACTGAGCACACAGGACCTCACC

SEQ ID NO:21
AATTTTCGAACTACAGTTACTGAGCACACAGGACC

SEQ ID NO:22
ATGGGCCCTTGGTGGAAGCTGAGGAGACGGTGACCGTGGTCCCTTG

SEQ ID NO:23

TTGGATATCTCTCCACAGGTGTCCACTCCGAAATTGTGCTGACTCAGTCTCCA

SEQ ID NO:24

CTACCGTACGTTTAATCTCCAGTCGTGTCCCTCCGCCGAA

SEQ ID NO:25

TTGGATATCTCTCCACAGGTGTCCACTCCGAGGTGCAGCTGGTGGAGTCTGG